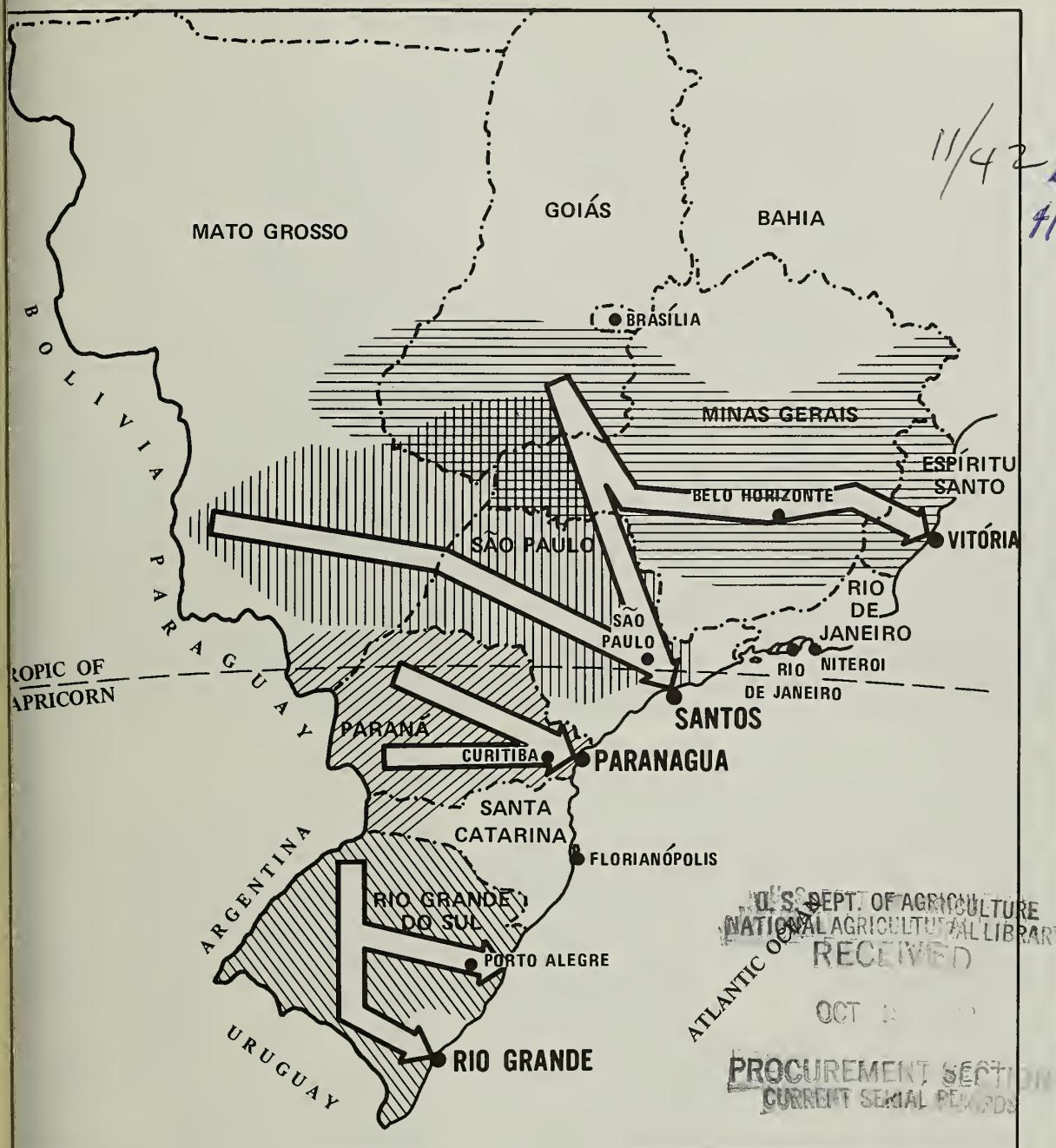


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October 8, 1973

Brazil's Export Corridors

New Zealand Poultry

Foreign
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This week's cover:

Map illustrates planned development under Brazil's new Export Corridors Program. In addition to improving transport, storage, and port facilities, the program calls for bettering farm production technology. See article, this page.

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Brazil Plans To Increase Sales Via Export Corridors Program

By SAMUEL O. RUFF

Foreign Demand and Competition Division
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A Brazilian exporter paying \$35 a ton for corn at an interior point in 1971 had spent \$54.44 a ton by the time his corn was in the hold of a ship. High transport costs virtually erased the advantage of low farm gate prices. Brazil's Export Corridors Program is aimed at preventing this situation.

The goal of Brazil's new Export Corridors Program is to make prices of Brazilian agricultural commodities more competitive on the world market and increase to 11 million tons by 1976 exports of high-demand agricultural products including corn, soybeans, sorghum, beef, frozen juices, and vegetable oils. An improved internal transport and storage system and better production technology are primary components of the program.

In 1972, the first year of the program, a record 2.7 million metric tons of agricultural products were shipped. Already by the end of the first 5 months of 1973, exports of 2 million tons had been reported.

Brazil hopes to capitalize on strong world demand for soybeans, beef, corn, and orange juice, products for which sales have shot up tremendously during recent years. (See *Foreign Agriculture*, July 30, 1973.) The Government believes Brazil can reap more profit from expanded exports of these commodities, slated to grow at 15 percent annually,

than from exports of the traditional foreign exchange earners: Coffee, cotton, sugar, and cocoa.

In 1972, Brazilian soybean production was almost 10 percent of U.S. production of 34.9 million tons. Exports of 1.1 million tons of soybeans and 1.2 million of soybean meal and oilcake, compared with U.S. sales of 12 and 3.6 million. Beef and veal sales totaled 169,000 tons, about 37 percent of Argentine exports. Although increased Brazilian exports will be competing with U.S. soybeans and Argentine beef, world demand for both products is growing so quickly that for the next few years it may easily absorb all exportable supplies of the three countries.

The Export Corridors Program is an integrated effort between the National and State Governments, cooperatives, private business, and foreign investors (notably the Japanese). The Study Group for Integration Policies (GEI-POT) of the Ministry of Transportation is the coordinating agency.

The term, "Export Corridors," includes both the physical corridors—a series of storage and transport facilities (on the inland export route) from farm storage to railroad collection points to the ports—and increasing availability of production inputs for creation of exportable farm surpluses.

The production technology program has intensive and extensive goals. Yields are to be increased through research, improved seed, distribution of fertilizer, use of tractors, more agricultural ex-

BRAZIL: EXPORTS AND EXPORT GOALS FOR SELECTED AGRICULTURAL COMMODITIES 1970-76
[In millions of metric tons]

Commodity	1970	1971	1972	1976 ¹
Corn	1.47	1.28	0.15	² 4.0
Soybeans . . . . .	.29	.21	1.10	³ 3.0
Sorghum	—	—	—	1.0
Pellets ⁴ . . . . .	.87	1.00	1.20	³ 2.0
Meat and frozen juices . . . . .	.15	.20	.26	.46
Vegetable oils . . . . .	.19	.20	.25	.4
Total	2.97	2.89	2.96	10.86

¹ Projected export capacities. ² Corn production may be reduced due to increased soybean acreage. ³ This goal may be reached before 1976. ⁴ Soybean meal, etc.



Paranagua (top) is one of three major ports being improved under the Export Corridors Program, which will facilitate shipments of soybeans (left) and other farm exports by funding new internal transport and storage facilities, such as the grain elevators at Sao Borja (above).

tension work, and provision of ample credit for the farm industry. At the same time, crop area in the newly settled "campo cerrado"—the savannah area of the Central Plateau of Mato Grosso, Goias, and Minas Gerais States—is to expand.

The program for agro-industry (oilseed crushing facilities, slaughterhouses, fruit juice processing, and other such operations) is left largely to private enterprise. The Government will provide complementary services essential for moving these products to the ports under the Export Corridors Program. Slated also are Government expenditures of \$125 million for refrigerated storage and food processing facilities for export commodities such as beef, citrus juices, and oilseeds.

Development of transport and storage facilities has been given priority by the Government in the National Development Plan for 1972-74. Inland freight for soybeans was 10-15 cents per bushel higher than in the United States the year the Plan went into effect, and the Government plans to cut future transport costs by bulk handling.

RAIL TRANSPORT is of major importance in the Export Corridors Program. The Government is working to provide better rolling stock and trackage linking collection points to ports as well as storage at inland collection points for bulk cargo accumulation. Port improvements and loading facilities are designed so that bulk carriers can enter and load at ports.

Government plans call for increasing total port capacity to 4.5 million tons by March 1973, 9 million tons by March 1974, and 11 million tons by March 1976.

The \$563-million port program is an expansion of projects well underway in the ports of Rio Grande and Santos, (for which the World Bank and Canadian interests had already made loans of \$30 million and \$10 million in 1972). It involves provision of vertical silos, dockyard locomotives, grain elevators, conveyors, container handling equipment, and rail connections. Emphasis is on improvement of the three major ports used for export of agricultural products: Santos in São Paulo State; Paranaguá in Paraná; and Rio Grande in Rio Grande do Sul. The smaller mineral exporting port of Vitoria is also being equipped on a smaller scale for agricultural commodities.

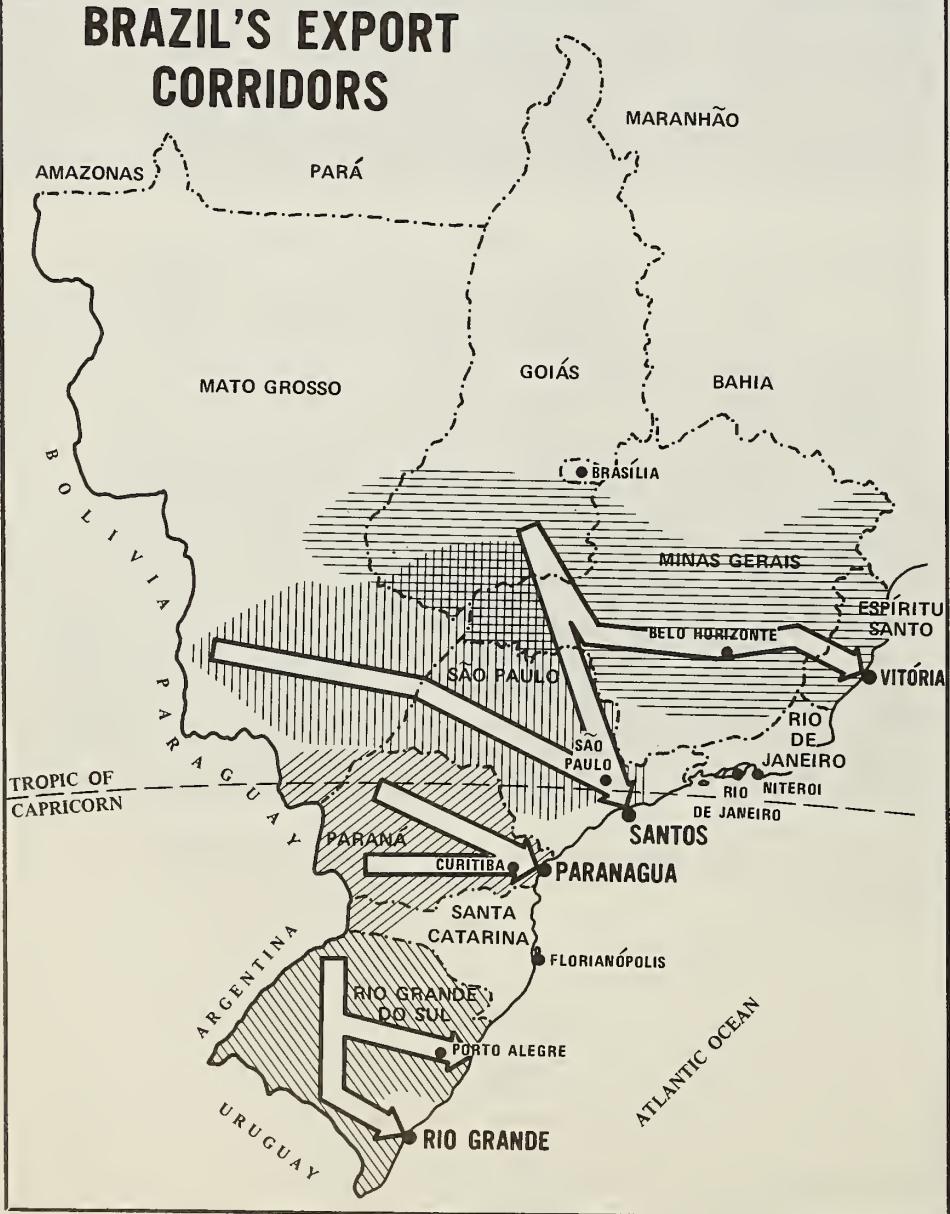
Planned port facilities for corn and soybeans include 330,000 tons of grain silo capacity and five high-speed grain loaders able to load 1,500 tons an hour. Capacity of the port of Santos will be expanded by 100,000 tons of grain silo storage and two high-speed loaders. Paranaguá, dredged to 13-14 yards deep, will gain an equal amount of facilities. Rio Grande will add 100,000 tons of grain silo capacity and one high-speed loader, while Vitoria gains 30,000 tons of grain silo capacity.

For beef, there will be up to 30,000 tons of total refrigeration storage in plants in Santos, Rio Grande, and Vitoria, as well as the already completed 15,000-20,000-ton facility at Jaguare, a suburb of São Paulo. The 15,000-ton meat refrigeration plant at Santos will be used alternatively for storage of fruit juices.

Inadequate port and storage capacity limited agricultural exports during 1965-72. The ports of Santos and Paranaguá had been able to handle only about 660,000 tons of the 1 million tons of corn available for export in 1965. Progress in improving facilities is evidenced by spectacular growth in corn exports to 1.5 million tons in 1970.

Previously, storage at Santos meant railroad cars and trucks covered with tarpaulin. At Paranaguá, the shallow draft of 8 yards permitted only partial loading of ships, which had to sail north to Santos to top off their cargo. Also, a one-way road from Curitiba to Paranaguá restricted truck deliveries.

BRAZIL'S EXPORT CORRIDORS



And in general, port storage, loading, and drying equipment were inadequate for bulk handling of grain.

Completion of the new viaduct opening the road between Paranaguá and Curitiba and a new 10,000-ton silo at Paranaguá in 1968 helped combined capacity of the two ports reach 1.2 million.

Brazil has also been actively developing grain storage at inland points since the bumper wheat crop of 1968 disclosed an acute shortage. That year, wheat piled up in schoolhouses, clubs, churches, military barracks, and other community centers. By 1970, the Government had increased warehouses and silo capacity in Rio Grande do Sul, the major wheat producing State, by 400,000 tons.

In 1972, the Government inaugurated a \$60-million storage program, of which \$30 million was lent by the World Bank. By then, the National Storage Agency (CIBRAZEM) had bought 70 inflatable warehouses for the central southern regions. Also, \$18.5 million had been allocated for purchase of 13 portable metal grain silos—with total capacity of 52,000 tons—for the States of Goias and Mato Grosso. The Export Corridors Program will provide at least 1.9 million tons of additional storage space, or one-third of additional needs for the next 4 years.

Along with the World Bank, other international organizations and interests are investing in the Export Corridors Program. The International Coffee Organization is loaning \$7.5 million for use in augmenting production of commodities other than coffee.

A GERMAN CONSORTIUM of nine companies is investing \$367 million in joint ventures with Brazilian interests in meat packing and refrigeration plants in the States along the western extremities of the Export Corridors: Goias, Mato Grosso, and the adjacent western triangle of Minas Gerais. The consortium plans for eventual annual export of 100,000 tons of processed meat to the European Community.

Japan, the most important foreign investor, has traditional ties with the country where some 700,000 persons of Japanese ancestry are settled, many on farms. The Japanese have abundant foreign exchange reserves to invest in developing new sources of supply for corn, soybeans, and sorghum. They hope Brazil's Export Corridors Pro-

gram will reduce internal transport costs and insure regularity of shipments.

Planning Secretary of the State of São Paulo Miguel Colassuonno reported last year, "The Japanese are interested in being supplied on a regular basis with 10 million tons of soybean and corn annually, whereas we (in the State of São Paulo produce 1 million. However, they seem willing to finance the entire production process so as to secure at least part of their order—from financing the cost of fertilizer to building roads to keep production moving." Directly related is the announcement by the Mitsubishi group that it will invest \$1.2 billion during the next 5 years in Brazilian food and mining sectors.

The Marubeni firm recently bought a 9,884-acre farm in Mato Grosso State to plant soybeans.

Between October 1972 and January 1973, Japanese interests have funded three loans totaling \$256 million. A

fourth for \$100 million was under discussion in February.

One Japanese loan is an export credit of \$36 million, principally to import equipment now beginning to arrive from Ishikawajima Harima Heavy Industries and C. Itoh Company for the ports of Santos, Paranaguá, and Rio Grande. This loan, 80 percent of which is from the Japanese Export-Import Bank and 20 percent from private banks, provides for a 7-percent interest rate, with 10-percent down payment and amortization over a 9-year period beginning January 1974.

The second loan, a \$20 million credit extended by private banks, is for cost outlays in the three ports. The third loan is a \$200 million credit for 24 banks to the Brazilian Government to finance railroad and port projects. The proposed fourth loan would provide credit for importing Japanese railroad equipment, mainly locomotives, refrigerated cars, freight cars, and rails.

Late Rains May Cut Nigeria's Peanut Crop

Nigeria's 1973-74 peanut crop got off to a shaky start because of a delay in the arrival of early rains. As a result, output (official marketings) is preliminarily estimated at 450,000 tons, some 90,000 tons less than last year's. (All weights are in long tons and values in U.S. dollars.)

Although 1973-74 producer prices for peanuts were increased to \$143.70 per ton, \$19.33 over the previous year's level, the boost was announced after many farmers had switched to food crops which offered a similarly high income.

Should the foodgrain harvest this fall be poor, however, farmers may retain larger than normal supplies of peanuts for their own consumption. And if current high prices of foodgrains continue past the harvest, this too will probably influence the amount of peanuts eaten as food.

Peanut plantings were made 2 to 3 weeks behind schedule because rains, which normally fall fairly steadily in May and June in some areas, were spotty during these months. Widespread precipitation was not received until the first week of July. As of mid-July peanuts were still being planted and in some areas were being replanted as those put down in June had been lost to the rain shortage.

Because of the late plantings, per acre yields this year depend on the length of the rainy season. If it ends about the same time as it normally does, the production estimate may have to be revised downward from 450,000 tons. Should the rains continue longer than normal, an average to good crop can be expected.

A drop in fertilizer use is also expected to influence the size of the peanut crop this year. Governments in the northern States were late in placing orders, and there was an abnormal shortage for the June plantings. The situation had greatly improved by July, but the overall supply picture was muddled by many farmers who bought fertilizer at the low subsidized price and resold it at a profit.

Official figures are not yet available regarding marketings in 1972-73, but the total has been estimated at 540,000 tons, nearly 240,000 tons greater than in 1971-72. Kano State marketed around 250,000 tons this year, compared with 130,000 tons 1 year earlier. North Central State marketed 101,500 tons, compared with 55,300 tons the previous year.

Nigeria's peanut exports during calendar 1972 were 104,500 tons, valued at \$29.3 million. During the same period, exports of peanut oil and peanut cake

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New Zealand Ups Broiler Output But Imports U.S. Turkey Items

By ROLLAND E. ANDERSON, JR.
Former U.S. Agricultural Attaché
Wellington

INCREASING PRESSURE for inexpensive meat protein over the last decade has led to rapid expansion of New Zealand's poultry industry. Last year, New Zealanders consumed a total of nearly 47 million pounds of poultry meat, worth an estimated US\$27.5 million.

The future looks good for imports of U.S. specialty turkey items. New Zealand's turkey production is expanding, but it has not experienced the soaring growth of the broiler industry.

Broiler production, virtually nonexistent in New Zealand 9 years ago, has developed into a major industry. The number of broiler chickens rose nearly 14 percent during 1972 to 12.5 million birds. Broiler weights averaged about 3.2 pounds live and 2.5 pounds dressed.

Total poultry consumption in 1972 is estimated at 15.7 pounds per capita—two-thirds greater than 5 years ago—and is expected to increase about 2 pounds per person in 1973 to 17.5 pounds per capita. Total poultry meat production is forecast at 87 million pounds per year by 1980. Broiler production will account for nearly all of the increase and about two-thirds of the total.

General Foods, the major broiler producer, controls an estimated three-fourths of the industry. Fully integrated through its parent company, J. Wattie Canneries, General Foods controls breeding, hatching, and feed manufacturing.

The bulk of General Foods' grandparent and parent stock is Tegel strain broiler chickens, developed in Australia.

Nearly 10 years ago, the company first introduced the broiler as a frozen product, which still accounts for the bulk of sales. Recently, it acquired the Kentucky Fried Chicken franchise for New Zealand and found U.S. "southern fried" chicken a gold mine.

General Foods' largest competitor, Scientific Poultry Breeders (SPB) markets under the Golden Coast brand. This company has carried out test marketing of fresh broilers during the

past 3 years with encouraging results. Its meat-type broiler is the Australian Silver Star, and annual production is now estimated at about 1.75 million birds.

Latest entry into the N.Z. broiler field is Atlas Majestic Industries (AMI). The company's move into poultry comes after a 3-year study of the food market showed considerable growth potential in N.Z. poultry consumption, especially

in marketing of fresh broilers.

Most of the industry is located near Christchurch and New Plymouth, with somewhat smaller flocks around Auckland, Palmerston North, and Wellington.

The majority of growers have contracts with the large companies and raise broilers for specified prices. Current liveweight prices for broilers are about 29 cents per pound. Growers usually supply only capital and labor. The company supplies chicks, feed, management programs, and field services to broiler producers.

As in the United States, birds are reared to between 8-10 weeks in controlled environment sheds. Most units use infrared bar heaters, but newer units have oil-fired, hot-air plants, which ventilate as well as supply heat.

Broiler feed rations differ substan-

New Zealand Tests U.S. Processed Turkey

A new but limited market for U.S. further-processed turkey products was opened recently when the New Zealand Ministry of Agriculture and Fisheries agreed to permit their entry.

A sample shipment of 60 pounds of turkey rolls and roasts was market tested by Wilson Neill, Ltd., Dunedin, New Zealand, and the U.S. products were well received by the New Zealand hotel and restaurant trade. The sample products ranged in price from about US\$1.37 per pound for turkey rolls to US\$1.92 for oven-roasted breasts and US\$2.53 for oven-roasted natural-shaped breasts.

These prices indicate that the market will be largely limited to the hotel, restaurant, and tourist trade. In fact, market surveys conducted recently have shown that the retail trade is expressing little interest.

Three New Zealand firms are now expressing interest in importing U.S. further-processed turkey products. They are Wilson Neill (holders of the original import license); Wilson Meats (Auckland), subsidiary of Wilson Meats in Chicago; and General Foods, subsidiary of Watties Industries, Ltd.

On June 28, 1973, the New Zealand Department of Trade and Industry issued each firm with a license to import US\$37,000 worth of further-processed turkey products from the United States, and Wilson Meats and General Foods (both much larger firms than Wilson Neill) will be importing their allotments soon.

The New Zealand Department of Trade and Industry has stated that it will favorably consider granting further container load licenses (valued at about US\$37,000) to any other suitable firms that apply.

It has been the experience of the U.S. Department of Agriculture that introduction of U.S. further-processed poultry products has benefited the turkey industry in the host country. First, the U.S. product established new marketing and distribution channels that are not in competition with domestically produced fresh products that move through traditional seasonal channels.

Secondly, further processed, highly sophisticated U.S. cooked products supply a demand that cannot be filled by the domestic industry, resulting in a larger consumer market and increased consumption of all turkey products. Without exception domestic industries have continued to grow in countries where U.S. cooked-turkey products have been freely imported and where market development activities have been carried out.

—Based on dispatch from K. P. RYAN
Office of U.S. Agricultural Attaché, Wellington



Modern New Zealand broiler house (top) incorporates suspended tube feeders (above). At U.S. Embassy reception in Wellington (right and below) sampling U.S. further-processed turkey are U.S. Sen. Carl T. Curtis (Nebr.), center, and N.Z. Minister of Tourism, Mrs. Tirakatene-Sullivan, and Minister of Agriculture and Fisheries Colin J. Moyle.



tially from those in the United States. Approximate percentages of feed ingredients would be about 45 percent barley, 15 percent corn, 18 percent wheat and wheat byproducts, and 22 percent other vitamins and concentrates.

Corn, however, is becoming increasingly important in broiler rations. Production has gone up 133 percent in the last 5 years to about 4.7 million bushels from about 40,000 acres. A further 20-percent increase is expected in 1973-74.

Soybeans are also growing in importance. About 1,000 acres were harvested this past season. Stock and station agents are hopeful that over the next 5 years soybean acreage can be increased to 6,000-7,000 acres. Contractors are importing about 1,200 long tons of U.S. soybeans this year to encourage feeders and manufacturers to use more protein in their feeds.

Present price movements work in favor of poultry producers. The gap between prices for broiler meat and other red meats is narrowing, and consumption is increasing. Beef, veal, pork, and sheepmeat prices have all increased sharply during the past year but broilers have also risen in price to about 93 cents per pound, retail. However, pork chops are selling for \$1.07 per pound, sirloin and porterhouse steaks at about \$1.33, ham at \$1.60, and fillet steak at about \$2 per pound.

Sheepmeats are still a good buy, but have increased to about 67 cents per pound for lamb chops, and hogget legs are selling for around 61 cents per pound.

Kentucky Fried Chicken franchises have recently opened in Auckland and Wellington. Reception of "southern fried chicken" in New Zealand had been so tremendous that further expansion is planned in a number of major New Zealand centers. A new franchise, "Homestead Fried Chicken," a New Zealand firm, has recently opened in the Wellington area.

New Zealand turkey production has not experienced the same expansion as the broiler industry. Most capital invested by the industry has been in laying and meat-type operations. Therefore, only about 250,000 turkeys were raised in New Zealand last year.

Although many growers still breed, hatch, and rear their own stock, specialization is increasing in the turkey industry. Some specialize in selling

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Cocoa, Long a Top Nigerian Export, Now in No. 1 Spot

By ALVIN E. GILBERT

Former U.S. Agricultural Attaché
Lagos

NIGERIAN AGRICULTURE has passed through a somber period in the past few years as production of a number of export commodities has decreased. One bright spot has been the fairly recent emergence of cocoa as the top agricultural export commodity and a major earner of foreign exchange.

Nigeria's peanut production fell off drastically during the 1970-72 period and in 1972 the country was not able to live up to its reputation as the world's leading peanut exporter. A similar situation exists with exports of palm products; these fell off drastically during the country's civil war and have only partially recovered. With domestic palm oil consumption on the increase, many observers think Nigeria will be importing palm oil in a few years. At present Nigerian palm product exports consist of palm kernels, palm kernel oil, and palm kernel cake.

Tobacco production has barely kept up with demand and even then certain types are in short supply. Cotton also was once a sizable export crop but here again production in most years has been hard put to keep up with demands of the domestic textile industry.

Meanwhile, basic food crops have become more expensive because of a tight supply situation brought on not only by inadequate production levels but also by chronic problems of transportation and storage. Poultry-product prices remain high—the result of high grain prices—and red meat still lies beyond the reach of most families as an everyday food item.

The rise in cocoa's importance as an export money earner is no sudden phenomenon. Over the years cocoa has been among the country's three leading export crops—the other two being peanuts and oil palm products. But whereas peanuts and oil palm products have dropped back in importance, the cocoa industry has continued to move forward and production has trended upward. Indeed the 1970-71 cocoa crop was the largest ever.

In 1972-73, the crop was not as large as had been expected but high world prices will again make cocoa the top agricultural foreign-exchange earner.

Reasons for cocoa's continuing forward motion are not fully clear, although there has been a gradual increase in output over the last 75 years. In 1895, Nigeria exported some 21 tons. By 1917, exports had risen to 15,000 tons, the first time the level had surpassed 10,000 tons. It took until 1937 for production to reach the 100,000-ton mark and the 200,000-ton ceiling was not broken until 1965 when the total shot to 305,000 tons as a result of what was then the record crop of 1964-65. Since then exports have not fallen far below the 200,000-ton level. In 1972 the figure was 224,000 tons.

Probably the most important reason for larger cocoa crops in recent years has been an attractive price level which encouraged growers to take better care of their trees. Adoption of proper spraying habits also helped.

Some farmers have even given up producing their own food crops to devote more time to their cocoa. This worries some oldtimers who feel every farmer should grow his own food supply, but it is an encouraging move toward specialization—something Nigerian agriculture must practice if it is going to move ahead with the rest of the economy.

Cocoa outturn has also been helped because it tends to be concentrated in the compact Western State, where there are generally adequate roads, and where there is an established extension service. It is an area relatively close to the port of Lagos which handles most of the crop.

In contrast, commodities which have not done as well as cocoa (peanuts and oil palm products) are grown over wide areas which involve a number of States. Prices of these crops have not been as attractive as those of cocoa and, in the case of peanuts, returns from basic

foodstuffs—grown on the same land—have risen to more attractive levels. In the case of oil palm products, the civil war intervened and handed a heavy blow to what was already a declining and apparently fragile marketing system.

Not all of Nigeria's cocoa is exported as beans. A cocoa processing factory, Cocoa Industries, Ltd., got underway in 1967. It annually takes 25,000 to 30,000 tons of beans which it processes into cocoa butter, cake, liquor, and powder. Most of this output is exported. Nigerians consume very little chocolate per capita.

The plant is owned by the Western State of Nigeria and is located adjacent to the State's cocoa storage facilities at Ikeja, near Lagos. Occasionally new processing plants in Ibadan or Lagos are proposed, but to date none of these have materialized.

Significant in Nigeria's advancement in cocoa production has been the Cocoa Research Institute of Nigeria at Gambari near Ibadan and its various substations throughout the State, which provide producers with new and improved seedlings. The Institute also carries on research into ways to protect Nigeria's cocoa from insects and disease. Its facilities are also used to train workers for special projects such as the rehabilitation program now being undertaken with the help of a World Bank loan.

THE GOAL OF THIS plan (which got underway in October 1971) is to rehabilitate some 48,000 acres over a 4-year period. If successful, a bigger plan is envisaged which would revitalize up to 1 million additional acres. Total funds allocated now total \$12.5 million.

Assuming about 1.2 million acres presently in cocoa, much of it in old trees, a program such as this could make cocoa an even more important factor in Nigeria's long-range economic picture. An official report in 1966 estimated another 1 million acres are suitable for cocoa, mostly in the Western State.

Nigeria's Second National Development Plan (1970-74) recognized the importance of cocoa to Nigeria's agricultural economy but noted "the danger of a progressive decline in total production since 50 percent of existing acreage is nearing the end of its productive life." To meet this problem, the Government has pledged grants or loans

to help rehabilitate old stands and to make new plantings. It also pledged the incentives of better producer prices, subsidies for fertilizers and insecticides, and intensive extension assistance.

An interim report on the progress of the 4-year plan reported some advancements but called the results "not quite satisfactory."

At the Federal level, a new policy was recently announced to encourage increased output of export crops, including cocoa. Export taxes (which for cocoa ran to about 20 percent) have been abolished; States will instead be permitted to impose their own produce taxes of up to 10 percent. Another change is that producer prices for export crops will henceforth be set at the Federal level rather than by State or

regional marketing boards. In this way the Federal Government can assure a fair price to producers. Should individual States lose money on such transactions, losses would be made up by the Federal Government.

incentives for producers.

Nigeria remains a member of the Cocoa Producers Alliance which includes all the other important cocoa producing countries such as Ghana, Ivory Coast, Brazil, and Cameroon. Nigeria is also a strong advocate of the International Cocoa Agreement that became effective in June 1973. Producers are hopeful the Agreement will stabilize the market, eliminating the traditional ups and downs of the supply-demand cycle, and enable developing countries to better plan allocation of their resources. In the trade area, however, Nigeria has generally supported free trade and has shunned such arrangements with the European Community as the Yaounde Convention.

FINALLY, THERE is to be a reform of the Nigerian Produce Marketing Company and its policies to assure export crops being marketed as efficiently as possible.

In adopting a national policy for cocoa, Nigeria's increasing petroleum revenues make it possible for the Government to ease its reliance on cocoa (and other export crops) as revenue earners. More of the income from cocoa can now be channeled back into greater



Left, a Nigerian farmer, aided by a smiling assistant, harvests pods from a young cocoa tree. Above, a group of farm women prepare cocoa for market by removing beans from the pods. This is the first step in the fermentation process that rids the beans of their mucilaginous cover.

Paris Meat Trade Moves to Rungis Market, Closing Era of Les Halles

By BRUNO JULIEN
Office of U.S. Agricultural Attaché
Paris

In THE COURSE of history the old often gives way to the new with a resulting increase in efficiency, but an accompanying loss of tradition and romance. This happened at the end of January 1973, when the Paris meat trade moved from *Les Halles de Paris*, the century old wholesale food market near the center of the city, to the new and modern Rungis market located near Orly Airport in the Paris suburbs. This move marked the final abandonment of the historic old market.

For years *Les Halles* had served not only as the wholesale distribution point for all perishable foods for the Paris area's 10 million consumers, it was also a magnetic attraction for tourists.

After sampling Paris night life, they often stopped in the market area for a late dinner of onion soup and to thrill to the hustle-bustle of Paris' vendors as they pushed their handcarts through narrow, crowded streets. But because of the market's growing shortage of space and lack of communication facilities, it became increasingly apparent *Les Halles* had outlived its usefulness.

In March 1960, a ministerial committee decided it was necessary to build a wholesale market outside of Paris, and 8 years and 51 weeks later the national market at Rungis—the largest food distribution center in Europe—was opened to replace *Les Halles*.

After 4 years of operation—since March 3, 1969—Rungis market is thriving and growing rapidly. One of a number of national markets opened during the same period, construction of Rungis market was financed by the French Government and the Rungis Management Company (SEMMARIS), an organization of the firms and individuals using the market's facilities. SEMMARIS administers and controls the activity of the market and leases shops, stores, and other installations to the users.

Consisting of an area of over 2 square miles, Rungis market is located 4 miles from Paris southern gate, and is served

by road, rail, and air.

The railway station at Rungis can handle 500 freight cars daily. Service roads and branch railway spurs connect the area's shops and warehouses with the main line. There is an adequate siding on which railcars can be spotted prior to being unloaded.

The internal highway system at Rungis, capable of handling heavily loaded trucks, is laid out so that traffic congestion is avoided. A one-way traffic ring is designed to give trucks access to parking areas having room for 10,000 vehicles. The ring is also connected to the Paris-Marseilles Highway and to the Paris circumferential highway. Thus trucks from anywhere in France can bring goods to Rungis without going through the French capital.

Neighboring Orly International Airport is a critical factor in the Rungis supply structure. Perishable goods, coming long distances by air—California strawberries, for example—are quickly offloaded and dispatched to the market.

The juxtaposition of the three means of transport allows domestic suppliers and importers and exporters greater freedom of choice in moving their goods to and from the new market.

The Rungis market's selling area covers about 544 acres. It includes sales outlets, warehouses, and offices. Shops are situated in large structures where central aisles permit easy passage for buyers and their wagons. A closed-circuit TV system is used throughout the market to relay prices and other information.

Each product group is separated from the others and has its own collection of above and underground warehouses, shops, and offices. Of a total of 421,630 square yards of facilities, 23,300 are devoted to administration uses. Product-handling areas range from the 23,900 square yards devoted to the handling of flowers to 221,000 for receiving, warehousing, and selling fruits and vegetables. The meat and the fish areas are 38,300 square yards and 28,700, re-

spectively. Dairy products take up more than 86,000 square yards.

One administration center contains 7,100 square yards of floor space, while an entire building is devoted to the offices of importers and exporters. There is a banking center with 20 foreign and French banks, a police department, veterinary and fruit inspection services, and numerous restaurants.

Wholesalers must have a guaranteed annual turnover in order to rent space at Rungis—15 metric tons per square meter (1.196 square yards) annually in the case of fruits and vegetables, and 10 tons per square meter for dairy products and fish.

Market ancillary areas include a large depot for trucks with ample parking space, a center for handling regional purchases and shipments, a 272-acre warehouse and foodplant area where future storage and processing facilities may be built, and receiving and shipping areas for domestic and imported foods. There are also a truck service center, a hotel and visitors' center, and a large open area where other types of indus-



Above, a section of the fruits and vegetables building at Rungis Market in Paris. Closed television receivers and public-address speakers located along the aisle are used to transmit the latest market information. Far right, overall view of Rungis Market with the flower building at center. Right, overcrowding at the now defunct *Les Halles* often forced tradesmen to set up their stalls outside the main building.

trial and commercial buildings may be constructed at a later date.

With the transfer of the wholesale meat operation from Les Halles de Paris in January, Rungis is now able to provide wholesale lots of all perishable foods, wines and alcoholic beverages, and flowers.

The 1972 market value of foods handled by Rungis operators amounted to \$2 billion. The volume was some 2.1 million tons, breaking down (in thousands of metric tons) as follows: Fruits and vegetables, 1,500; dairy products, 250; fish, 110; food items, 270; and flowers, 40. In January 1973, the meat section was transferred from Les Halles in Paris to Rungis. Activity in the current year is expected to be about 400,000 tons.

Most of these totals are considerably higher than pre-Rungis figures. The 1.5 million tons of fruits and vegetables handled in 1972 compares with an annual average of 1.02 million handled in the period between 1966 and 1968. Dairy products at 250,000 tons last year compare with a 1966-68 yearly average

of 140,000 tons. How much of this increase is attributable to the move into the new market is uncertain at this time, but probably some of it was.

Although the Rungis market is primarily concerned with supplying the Paris area, it has a potential which may some day enable it to become Europe's largest international food marketing center. The expertise of its employees and the size of its staff—12,000 full-time workers—its location, its infrastructure such as roads and warehouses, and the concentration in one place of all categories of buyers, sellers, and handlers of food, are all inducements that may serve Rungis well in the future.

ALREADY RUNGIS imports large quantities of the foods handled there. Forty percent of the 1.5 million tons of fruits and vegetables handled in 1972 came from more than 50 countries. While the main suppliers of imported goods were other European countries and former French Territories in Africa, the United States also provided some specialty items such as avocados and

strawberries, and citrus from California, Florida, and Texas.

Twenty-five percent of the fish sold by Rungis wholesalers came from foreign suppliers—mainly in the Netherlands. Oysters were imported by air from South Africa and Canada.

Buyers from several other European countries bought between 20,000 and 30,000 tons of foods in 1972. Most of these were medium-sized wholesalers, although several large restaurants in Belgium, Germany, and Switzerland bought food items directly from Rungis last year. A chain store in West Germany and one in the Netherlands have also established offices at Rungis.

Because of the convenience of having customs inspections made on incoming goods at Rungis instead of at the border, Spain and Argentina have established operations at the market. The Israeli, Moroccan, and Algerian marketing and promotional boards have taken quarters at Rungis, while South Africa, Australia, Mexico, and Brazil are reported to be considering such a move.



Cardamom Industry Spices Up Guatemala's Export Earnings

Cardamom, a tangerine-flavored spice, is gaining ground, literally and figuratively, as a cash crop on the humid, subtropical slopes of Guatemala.

Some 15 years ago, at a time coffee prices were falling rapidly, coffee growers who faced large world surpluses recognized the marketing potential of cardamom as an alternative or supplemental crop. They started planting it with relative intensity in the hope of recovering their coffee losses.

Cardamom (*Elettaria cardamomum*) is a herbaceous plant growing 8 or 10 feet tall like its cousin, the ginger plant. Lightgreen and violet flowers precede the appearance of capsule-like fruits that encase 15 to 20 small, coarse, but flavorful seeds.

The fruit is collected green or ripe and then dried. It yields an exportable product whose quality depends upon careful agronomic and technical procedures. The quality of cardamom, like that of other spices, determines the levels of preference and price attained in the world market.

Cardamom is marketed in the form of dried fruit, seeds, or, after extraction, as a fine, fragrant oil. Export value of the fruit sometimes tops \$2 a pound; and that of oil ranges from \$25 to \$42 a pound. It is used mainly

in the pharmaceutical industry and in perfumes, beverages, baked goods, and tobacco. Coffee drinkers in the Orient drop a few seeds into their beverage to release a slightly piquant and exotic flavor. It is considered a truly elegant spice for use in fine cookery and beverages.

Area planted to cardamom was estimated by trade sources at 17,260 acres in 1972, a drought year, and production was about 2 million pounds of dried fruit. It is a \$3-\$4-million export crop in recent normal years. Northern European countries take about two-thirds of the shipments, and a lesser volume goes to the Middle East and the United States. In 1971, Jamaica, Switzerland, and the United States purchased the small total production of essential oil for \$89,000.

Cardamom is propagated by rhizome (rootstock) or seed. The plant begins to yield in its third year and has an average productive life of 15 years. Flowering, followed by fruit, is continuous during 8 or 9 months of the year. Harvesting involves several consecutive collections which reach a peak from August to October.

—By BENJAMIN GALLEGOS
Office of U.S. Agricultural Attaché
Guatemala City

GUATEMALA: CARDAMOM EXPORTS, VOLUME, AND VALUE
1956-72

Year	Volume	Value	Average value
	Million pounds	dollars	Dollars per pound
1956.....	0.07	123.6	1.76
1957.....	.20	368.2	1.85
1958.....	.16	282.0	1.76
1959.....	.33	512.7	1.55
1960.....	1.37	725.1	.53
1961.....	1.24	662.2	.53
1962.....	2.29	717.5	.31
1963.....	.83	874.0	1.05
1964.....	.83	1,045.4	1.26
1965.....	(¹)	(¹)	(¹)
1966.....	.96	2,356.3	2.45
1967.....	1.15	2,349.5	2.04
1968.....	1.34	1,879.7	1.40
1969.....	1.65	2,955.1	1.79
1970.....	2.13	3,972.3	1.86
1971.....	1.56	3,409.4	2.19
1972.....	1.40	2,258.2	1.61

¹ Not available. General Directorate of Statistics, Ministry of Economy, Guatemala, August 1973.

West German Honey Output, Imports Down in 1972

West Germany's production and imports of honey fell slightly in 1972 but the demand is still strong.

Estimated at 12,000 metric tons last year, honey output was down from the previous year's 15,000-ton level, paralleling a drop in hive numbers to 945,000 in December 1972, compared with 989,000 a year earlier.

West Germany's honey imports fell 44,800 tons in calendar 1972, a decrease of 4.2 percent from the previous year. The United States, once a major supplier to this market, dropped back to 14th position among the 34 supplier countries, with an alltime low of 1,009 tons, reflecting strong demand and high prices in the United States. Mexico was at the top, providing 9,958 tons, followed by the People's Republic of China (7,786 tons), and Argentina (4,763).

Estimated at 58,700 metric tons, West Germany's honey consumption in 1971-72 was about the same as in 1970-71. On a per capita basis this represented 2.07 pounds per person, compared with 2.09 pounds in 1970-71. For calendar 1972, consumption is estimated to have dropped to 55,600 tons or 1.97 pounds per capita.

Prices for imported honey showed a marked upswing in 1972 and continued to rise in 1973. The traditional price spread between imported and domestic honeys has narrowed somewhat, but imports are still the more costly.

Most honey is imported in bulk and price is a major factor for determining country of origin and volume. As a result, market chances appear better for U.S. suppliers who can provide specialty products, but much will depend on the competitiveness of U.S. prices.

The West German market for imported honey in 1973 will probably continue to be subject to supply difficulties, high price levels, and currency uncertainties. Also, for the first time in many years, high domestic interest rates on loans to importers have created a situation where the trade is not confident it can meet rising demand.

—Based on dispatch from
HOMER F. WALTERS
Assistant U.S. Agricultural Attaché
Bonn

World Retail Food Prices Continue High

Housewives around the world got some relief from high food prices during September, as summer fruit and vegetable crops came to market. Meat, dairy, and poultry products remain at high levels, however, although a slight drop in beef prices may give a hint of future price drops. By and large, though, comparisons of food prices remained difficult to make, as fluctuating exchange rates, food price freezes, and local marketing situations continued to complicate the global picture.

Italy, for example, placed a 90-day freeze on some food prices in mid-July. Italians usually avoid pork in the summertime, but increased beef imports have helped offset the pressure on beef prices. Italian orange prices jumped sharply over July levels—due to import ban on citrus fruits. The dollar prices of Italian foods are also distorted by the 3-percent appreciation of the lira since the July survey.

Most west European housewives enjoyed lower fruit and vegetable prices in September, as well as slightly less expensive beef cuts. The relief for beef prices may be temporary, however, as reimposition of the EC beef tariff in mid-September should slow imports and tighten supplies. Beef consumption is generally dropping throughout Western Europe as consumers have mounted greater resistance to high prices. Pork consumption is rising and poultry consumption is up sharply as consumers look to cheaper meats for relief.

Prices for animal products were up sharply in Japan, especially for pork and eggs. Japanese food prices are tied closely to world feedgrain prices—since nearly all animal feeds must be imported. Some relief may be in sight, however, as feedgrain and soybean prices have recently been dropping.

U.S. prices pressed upwards after the price freeze was lifted in July. September prices have slipped from August highs, however, as fruit and vegetables have been plentiful and beef and pork supplies have edged upwards.

RECENT FOOD PRICE INDEX CHANGES IN SELECTED COUNTRIES, 1973

Country and month	Index 1963=100	Percentage change from—		
		Previous month	Three months	One year
United States	May	151.2	+1.00	+5.15
	June	153.3	+1.39	+3.93
	July	154.5	.78	+3.21
Canada	May	149.8	.81	+3.81
	June	152.7	+1.94	+5.46
	July	187.3	+1.52	+7.27
Japan	May	184.9	-1.28	+1.93
	June	186.1	.65	.87
	July	184.5	+1.77	+5.25
United Kingdom	May	185.5	.54	+3.86
	June	185.5	+0	+2.32
	July	204	+1.49	+4.08
Denmark	May	207	+1.47	+5.08
	June	211	+1.93	+4.98
	July	136.6	+1.04	+3.17
Germany	May	137.8	.88	+3.38
	June	152.5	+1.46	+4.67
	July	153.7	.79	+5.06
Italy	May	154.5	.52	+2.86
	June	169.7	+8.30	+10.19
	July	170.6	.53	+10.21
Belgium	May	169.7	+5.3	+17.41
	June	169.7	.53	+8.30
	July	122.7	.57	+2.25
France ¹	May	124.3	+1.30	+2.90
	June	125.2	.72	+2.62
	July	125.2	+2.62	+9.25

¹ Index, 1970=100. National statistical series for selected countries.

SURVEY OF RETAIL FOOD PRICES IN SELECTED CITIES, MID-SEPTEMBER 1973
[In U.S. dollars per pound, converted at current exchange rates]

City	Boneless sirloin steak	Boneless chuck roast	Pork chops	Ham, canned	Bacon, sliced, pkged.	Cheese (Cheddar, Edam, Gouda)	Butter
	2.38	1.34	2.20	5.98	2.46	1.48	1.41
Bonn	3.69	.74	1.78	1.34	1.67	2.29	1.82
Brazilia	3.16	.69	.38	.43	2.43	1.16	.91
Brussels	2.09	2.04	1.13	1.28	2.25	1.61	1.28
Buenos Aires	2.75	4.42	1.67	2.37	2.18	2.14	1.51
Canberra	2.77	2.77	1.08	1.58	1.80	1.24	1.02
Copenhagen	2.54	4.22	1.40	2.01	2.46	2.84	1.25
London	2.54	4.42	1.30	1.30	1.25	1.59	.75
Ottawa	2.54	4.22	1.30	1.30	1.25	1.24	.74
Paris	2.77	2.77	2.25	(¹)	(¹)	1.61	1.11
Rome	2.77	2.77	2.25	(¹)	(¹)	1.61	1.11
Stockholm	2.54	4.22	2.04	2.21	2.29	2.37	1.64
The Hague	2.54	4.22	2.20	2.07	(¹)	2.82	1.30
Tokyo	2.54	4.22	2.20	2.57	3.66	3.42	1.35
Washington, D.C.	2.54	4.22	1.49	1.79	2.00	1.39	1.27
Median	2.76	2.76	1.58	1.82	2.27	1.88	1.24

City	Broilers, whole	Eggs, large doz.	Tomatoes	Onions, yellow	Apples	Oranges, per doz.	Bread, white
	0.84	1.03	0.19	0.09	0.33	1.23	0.45
Bonn . . . . .	.69	.70	.24	.59	.12	.68	.20
Brazilia	1.04	1.08	.29	.13	.27	1.45	.22
Brussels . . . . .	.37	.50	.29	.38	.17	(¹)	.24
Buenos Aires	1.13	1.08	.74	.30	(¹)	.60	.31
Canberra	1.58	1.24	.94	.31	.40	2.10	.39
Copenhagen . . . . .	.58	.89	.24	.17	.22	1.44	.15
London . . . . .	.78	.90	.33	.13	.16	.97	.21
Ottawa . . . . .	.90	1.17	.20	.20	(¹)	.34	1.37
Paris	1.03	.89	.20	.20	.32	(¹)	.24
Rome	1.28	1.23	.53	.26	.48	1.38	.61
Stockholm . . . . .	.78	1.08	.32	.27	.25	1.51	.17
The Hague	1.03	.61	.40	.19	.81	6.11	.36
Tokyo . . . . .	.71	.88	.39	.19	.39	1.07	.25
Washington, D.C. . . . .	.87	.97	.31	.20	.30	1.38	.25

¹ Not available. NOTE: Items may vary by quantity and type. Different marketing practices may distort some prices.

Sweden Opens Way for Imports of U.S. Soy Protein

By G. FROSTENSON
Office of U.S. Agricultural Attaché
Stockholm

THE GOVERNMENT of Sweden passed a bill on July 1 which substantially reduces import taxes for soy protein. This legislation probably will open the way for considerable imports of U.S. soy protein which have been limited by the higher tax. The new legislation reduces the present tax to about 9 U.S. cents per pound and calls for increased import taxes for nondefatted soybean meal, soybeans, and defatted soybean meal, if these products are intended for foods.

The Swedish Government's action is the result of several years of investigation which has revealed that soy protein is not a threat to animal protein consumption, and its value to public health is recognized.

The "soybean battle" has been raging in Sweden since the Swedish Parliament introduced import and manufacturing taxes on July 1, 1969, at the high level of 35 U.S. cents per pound equivalent on soy protein products which could be used as substitutes for meat. Exemption was made for isolated soy, which was bound in the General Agreement on Tariffs and Trade (GATT), and for soybean meal for feed. In addition, exemption was made for nondefatted soybean meal, which at that time was not considered suitable for use in the meat processing industry. The tax rate was temporary and subject to change—even increase—when the effect on the domestic meat industry had become better known.

In the same year a Fact Finding Committee named "the Milk Committee" was appointed for a further investigation concerning special taxes for imitation milk and meat products.

Introduction of the soy protein tax in 1969 was largely due to the belief that imitation foods would replace farm products, notably meat, to an undue extent.

Contributing to this feeling was the unusual success at that time of a powdered cream substitute of U.S. origin

which caused some concern in dairy quarters. Also, rather conspicuous advertising of imitation meat and meat substitute products, generated some suspicion and uncertainty. However, the farm organizations and the meat interests in general appeared to be favorably inclined toward soy protein because they apparently quickly grasped the advantages to the meat processing industry products.

The soy protein tax caused a dilemma for U.S. companies, their agents, and cooperators in Sweden, jeopardizing the initial success gained through methodical market development work. While the Swedish Fact Finding Committee was still at work, U.S. commercial soyprotein companies engaged a Swedish market research firm to study the economic, nutritional, physiological, and technical effects of using soy protein. In addition, a liaison was maintained with the Swedish Fact Finding Committee studying soy protein.

In February 1970, this Committee submitted a report which stated that the competitive strength of the soy protein versus meat had been overrated, and recommended a tax reduction. In this way, the difference between taxed soy proteins and the nontaxed isolated soy would be reduced and a tax reduction would be more in harmony with the lower taxes on dried milk and other related products.

Acting on these recommendations, the Government of Sweden reduced the tax to 20 U.S. cents per pound equivalent on July 11, 1970, for a 2-year period. Before this period expired on June 30, 1972, the new Food Administration, which began operating on January 1, 1972, was expected to issue regulations governing the use of soy protein in food and as a food, but the regulation concerning meat products was not officially available until March 1973. For this reason, the tax rate was not reconsidered before July 1, 1972, as intended. However, the Food Admin-

istration did issue several regulations in 1972 concerning branding and declaration of raw materials in packaged foods, milk, and milk products.

The new meat regulation establishes the minimum amount of meat that must be contained in certain meat products, traditionally named and marked: Hamburger meat 100 percent, meat balls 60 percent, hamburger patties 80 percent, and salami 100 percent (including offrinded hog fat). Sausage, sold under traditional names, may not contain soy protein, potato flour, milk, or other binders in a combined volume exceeding 3 percent of the commercial weight.

However, these restrictions apply to name-protected meat products only. In other products, the use of soy protein as a raw material is free, provided no reference is made to the agricultural products simulated or substituted. Thus, soy protein products may be produced and marketed under names as "soy sausage" and "soy patties." These new meat product regulations become effective on January 1, 1974.

Generally, the new food regulations

"New Swedish legislation probably will open way for considerable imports of U.S. soy protein which have been limited by higher tax."

regulate not only the use of soy protein, as at present, but all vegetable proteins. However, possible uses of soy protein products in food are more liberal, probably as a result of the Government study on the trend and present extent of soy protein use in food. The study's principal findings are as follows:

- Isolated soy is used primarily as a binder in the technical industry. Total imports in 1972 amounted to 929 tons of which 828 tons originated from the United States.

- Soy protein products containing less than 90 percent protein are used principally in the meat processing industry for meat balls and ready-made foods. Use of these products appears to have stabilized at about 500 tons per year, of which about 80 tons are used for health-type food.

- Nondefatted soybean meal previously was not considered suitable for use in the meat processing industry,

therefore, the tax has been at a level slightly below the relatively low level for oil cakes and meal for feed. However, some use has been found for it in the food processing industry. Imports in 1972 amounted to 1,200 tons, mostly from the United Kingdom.

Total use of soy protein in the meat processing industry is estimated at about 800 tons per year, principally as a replacement for binders of other types. The Government has attempted to estimate the extent to which soy protein might replace meat and has arrived at a total of 600 tons per year. In making this estimate, however, no consideration appears to have been given to increased consumption due to lower prices.

The new rules applicable under the Food Act and the lower import taxes can be expected to influence favorably the use of soy protein and other vegetable proteins. Already high meat prices have caused a shift to cheaper meat products in Sweden. Soy protein and isolated soy are expected to become fully competitive as binders in sausage and other mixed meat products, of which 165,000 tons are manufactured each year. A maximum rate of use (3 percent in meat-type sausage only) would correspond to about 4,000 tons of soy protein.

In addition, it can be assumed that textured soy protein will find increased use in the meat processing industry both as a stretcher and as a principal raw material in imitated meat products, notably sausage and meat patties.

Simulated meat products made exclusively of textured soy protein already have gained a market as health foods. Since 1972 a form of soy protein has been available for admixing in hamburger meat at home. However, none of these products containing soy protein are expected to affect the sales of meat unfavorably.

Already several U.S. manufacturers of soy protein are well represented on the Swedish market. Soy protein from U.S. beans also has been produced in Sweden for some years under a license agreement with a large U.S. firm. Another company has established a pilot plant for producing protein from rapeseed, or possibly another Swedish raw material. However, it is too early to determine if this effort will succeed economically due to problems with the hard shell and the glucosides of rapeseed in the production process.

Spain Converts Rice-Paddy Land To Iceberg Lettuce Production

For many years the Delta of the Ebro River on the Mediterranean coast of Spain has been largely devoted to the production of round rice, most of it for domestic consumption. But owing to the unprofitable prices obtained from this crop and growing manpower difficulties, this area is now being planted to field vegetables which are marketed fresh to the Catalán coast, Madrid, and north European markets.

One of them, iceberg lettuce, a newcomer to Spain, is being produced in the area on a farm located on recently reclaimed rice-paddy land. This lettuce is not being produced for the domestic market but for export to north European countries to be sold in competition with U.S.-produced iceberg in a market only recently developed by U.S. growers in cooperation with the Foreign Agricultural Service.

At present the farm consists of some 1,000 acres, all of which is devoted to the production of head lettuce grown from U.S. seeds and using U.S. production methods. The reclaimed rice paddies have been leveled with U.S. equipment and consolidated in tracts of approximately 25 acres each.

These individual plots are well drained on four sides by ditches where the high salinity water is accumulated and later pumped into the nearby Mediterranean. The soil is listed into ridges some 18 inches wide, 12 inches high, and spaced about 3 feet apart. Seeds are planted two rows to the ridge and later thinned for proper spacing. Field irrigation is done by conventional sprinklers using water from wells some 150 feet deep.

The manager stated that this is a high-cost operation, because rice-paddy land is expensive, costing as much as \$1,500 per acre. The cost of leveling, consolidation, and providing for disposal of runoff water poses quite a production problem.

At present the lettuce is cut by hand and each head is individually loaded into trucks for transport to the packing

sheds which house sorting and cleaning tables and lettuce bins. Women wrappers cover each head with plastic and labels, before placing the lettuce on conveyors to the packing room. There the packer places the product in vented containers holding approximately 2-3 dozen heads which are then vacuum cooled. Shipment of the iceberg lettuce to northern European markets generally takes approximately 3½ days by truck and often requires as much as 5 days by rail transport.

All machinery is U.S. made and production methods used by California growers are closely followed. By using different varieties of seed, they are able to produce lettuce some 9 to 10 months out of the year.

The manager reports that he will purchase his first lettuce harvester this fall now that the operation is about at the point where he can expect a reasonable profit from the investment.

One-third of Spain's total annual lettuce exports of about 334,000 tons are produced in the Ebro Valley. However, lettuce is only one of Spain's many varieties of fresh produce that have been intensively cultivated in recent years for export to the European market. Some of the major varieties are onions, cauliflower, and asparagus. In 1971 total Spanish fresh produce exports totaled \$177 million, with the European Community taking \$54 million and the United Kingdom \$41 million.

—By CLARENCE L. MILLER
U.S. Agricultural Attaché, Madrid



U.S. Agricultural Attaché to Spain, Clarence L. Miller (foreground), and hosts observe iceberg lettuce packing on tour of plant in Ebro River Delta.

EC'S CAP STIMULATES BIGGER DEMAND FOR ITALIAN TOBACCO

The European Community's Common Agricultural Policy (CAP) is stimulating demand for Italian tobacco. With the EC buyer's premium and export subsidy, specified tobacco varieties are available for export at prices substantially below most competitive leaf.

In 1972, the buyer's premiums amounted to 61 percent of the standard or target price for Grade A Italian flue-cured tobacco and 47 percent of the standard price for Grade A Italian burley; but for lower quality Grade C, the premium was about equal to the price paid to the producer.

As a result of this difference in cost for various qualities, some packers, who buy from producers and sell to manufacturers, have held their higher grade tobacco for the Italian Monopoly and offered lower grades for export. However, the Monopoly recently made it clear that the official price for Grade A tobacco would be paid only when a normal percentage of Grades B and C are available.

The effect of these premiums on the cost of the tobacco to the buyer may be illustrated by the following:

- A first buyer of 1972 crop Grade A Italian "bright" flue-cured leaf would have paid a standard price of 88 U.S. cents¹ per pound and would have received the EC subsidy of 54 U.S. cents per pound leaving a net cost of 34 cents.

- A first buyer of Grade A Italian burley would have paid a standard price of 71 cents and received a buyer's premium of 34 cents leaving a net cost of 37 cents. But for Grade C burley the buyer would have paid a standard price of 34 cents (48 percent of the Grade A or reference price) and received a buyer's premium of 34 cents leaving a net cost of almost zero.

These premiums, which were put into effect in mid-1970, have substantially stimulated Italian burley exports. Shipments of burley from the 1970 crop were estimated at about 30 million pounds, while shipments from the 1972 crop are expected to be about 48 million, a 60-percent increase. Flue-cured exports from the 1970 crop were about 4 million pounds, but from the 1972 crop are anticipated to be more than

double this level.

These buyer's premiums are provided on 11 varieties of Italian tobacco, three varieties of German, five varieties of French, and one variety of Belgian leaf. Recently standard and intervention prices and buyers' premiums were increased 1 percent for the 1973 crop on all EC varieties, except Italian burley and xanti plus an additional 1 percent on all Italian varieties.

In addition to the subsidies provided by the buyer's premiums, the EC also approved export subsidies for two varieties of 1971-crop Italian leaf, effective January 24, 1973.

The export subsidy for burley is about 9 U.S. cents per pound (0.18 units of account per kilogram). Eligible destinations for this type includes the Far East, the Maghreb countries, Egypt and Eastern Europe, including the USSR.

The export subsidy for Xanti-Yaka (an oriental variety) is about 14 U.S. cents per pound (0.29 u.a. per kilogram). All countries, excluding the EC-9, except Switzerland, Austria, and Lichtenstein are eligible for the export subsidy on this type.

—By ROBERT W. JOHNSON
Tobacco Division, FAS

Argentina's New Tobacco-Price Law Dismays Cigarette Manufacturers

Argentina's cigarette producers claim to be in dire straits following implementation of a new tobacco law. The law ties guaranteed tobacco returns received by producers to the wholesale price index for nonagricultural products. When a periodic review shows the wholesale price index has moved up by 15 percent or more, minimum returns to producers will be revised upward by a compensatory amount.

Because of Argentina's rampant inflation the law was implemented three times during the first 3 months of 1973. The guaranteed tobacco returns are increased by boosting buyers' prices plus a contribution from a special tobacco fund. This fund is financed with a 7-percent retail tax on cigarettes and about a 1-U.S.-cent-per-pack specific tax. An emergency additional contribution has been added to the two most recent increases to raise producer returns to the equivalent of 68 U.S. cents per pound for flue-cured tobacco and 60 cents for burley. Of this the buyers pay 29 cents for the flue-cured and 26 cents for burley.

Even with the fund's contributions, buyers have seen price increases on the 1972-73 crop ranging from 63 percent on flue-cured and burley to 149 percent on misionero, a native dark air-cured variety. The manufacturers were granted cigarette price increases of about 60 percent during 1972 and a 9-percent increase during the first 2 months of 1973.

The cigarette manufacturers claim increasing leaf prices coupled with the

limited retail price on cigarettes have put them in a severe cost-price squeeze. They also dislike the uncertainty created by the new tobacco law. Manufacturers of dark cigarettes point out that dark cigarettes are being forced off the market because of the shrinking price spread between dark and bright cigarettes. Dark tobacco producers still feel the guaranteed price is too low and they are disrupting deliveries to manufacturers.

Regardless of the cost-price squeeze claimed by cigarette producers it appears they have little choice but to buy domestic tobacco. Argentina's current policy is to restrict imports of other than essential goods. Tobacco imports are limited primarily to the oriental type with Greece being the major supplier under a special bilateral agreement. The 140-percent duty on leaf imports other than cigar and oriental will likely limit the use of imported tobacco regardless of other Government policies.

In addition to the restricted import market, cigarette manufacturers are finding increasing competition for domestic tobacco from exporters who claim foreign demand for Argentine tobacco is much greater than current supply. It seems therefore that cigarette manufacturers will more or less be forced to use domestic tobacco despite higher prices. However, they will undoubtedly press for higher retail prices that more readily keep pace with their rising input costs in the manufacture of cigarettes.

¹ Based on the 1972 exchange rate of 625 Italian lira = 1 unit of account and 581 lira = US\$1.

CROPS AND MARKETS

GRAINS, FEEDS, PULSES, AND SEEDS

Rotterdam Grain Prices and Levies

Current offer prices for imported grain at Rotterdam, the Netherlands, compared with a week earlier and a year ago:

Item	Oct. 2	Change from previous week	A year ago
	Dol. per bu.	Cents per bu.	Dol. per bu.
Wheat:			
Canadian No. 1 CWRS-14 ..	6.21	— 8	2.78
USSR SKS-14	(¹)	(¹)	(¹)
Australian FAO ²	(¹)	(¹)	2.59
U.S. No. 2 Dark Northern Spring:			
14 percent	5.65	— 12	2.49
15 percent	(¹)	(¹)	2.53
U.S. No. 2 Hard Winter:			
12 percent	5.69	— 4	2.52
No. 3 Hard Amber Durum ..	8.30	— 14	2.67
Argentine	(¹)	(¹)	(¹)
U.S. No. 2 Soft Red Winter.	(¹)	(¹)	(¹)
Feedgrains:			
U.S. No. 3 Yellow corn ...	3.31	+24	1.70
Argentine Plate corn	3.54	+19	2.05
U.S. No. 2 sorghum	3.33	+17	1.74
Argentine-Granifero sorghum	3.27	+15	1.76
U.S. No. 3 Feed barley ...	3.20	+22	1.66
Soybeans: ³			
U.S. No. 2 Yellow	7.22	+ 6	3.73
EC import levies:			
Wheat ⁴	⁵ 0	0	1.26
Corn ⁵	⁵ .27	— 2	1.13
Sorghum ⁶	⁵ .27	— 1	1.04

¹ Not quoted. ² Basis c.i.f. Tilbury, England. ³ New crop.

⁴ Durum has a separate levy. ⁵ Levies applying in original six EC member countries. Levies in U.K., Denmark, and Ireland are adjusted according to transitional arrangements. ⁶ Italian levies are 18 cents a bu. lower than those of other EC countries.

Note: Price basis 30- to 60-day delivery.

England, Wales Raise Grain Output Estimates

Hot, dry weather in August has improved the outlook for U.K. grain production. A record wheat crop of 5.1 million tons is now estimated for England and Wales, up 7 percent from 1972. Barley production is also estimated at a record 9.3 million tons, 1 percent higher than in 1972.

Australia Returns to Single Pricing for Domestic Wheat

Australia will have a single price, believed to be about US\$2.90 per bushel, for wheat consumed domestically during the crop year beginning December 1, 1973. At present the price for wheat for human consumption is \$2.75 per bushel

and that for feed and industrial use, \$2.30 per bushel. The two-price system began in 1969-70 when Australia had wheat surpluses and granted preferential prices on feed wheat. The Wheat Board gets an export price of about \$5.75 per bushel.

Grain Exports and Transportation Trends: Week Ending September 21

Weekly grain inspections for export and grain moving in inland transportation for the week of September 21 and the previous week were:

Item	Week ending Sept. 21	Pre-vious week	Weekly average, August	Weekly average, fourth quarter ¹
Weekly inspections, for export:	1,000 metric tons	1,000 metric tons	1,000 metric tons	1,000 metric tons
Wheat	976	1,020	805	755
Feedgrains	1,110	870	984	738
Soybeans	49	27	63	238
Total	2,135	1,917	1,852	1,731

Inland transportation:	Barge shipments of grain	Number	Number	Number
Number	420	473	482	376
Railcar loadings of grain	32,752	32,971	34,136	30,769

¹ Fiscal 1973.

LIVESTOCK AND MEAT PRODUCTS

Australia Sets

Beef Export Taxes

Australia's 1973-74 Federal budget provides for two taxes on beef and veal exports—the general meat export tax of 1 cent per pound, scheduled to go into effect October 1, and a special 0.6 cent per pound tax to go into effect later.

Australia imposed the general tax in an effort to recoup from the meat industry some of the cost of operating its export meat inspection services. The special tax will finance a campaign to eradicate bovine brucellosis and tuberculosis.

European Community Reimposes Duty on Cattle and Beef

Effective September 3, 1973, the European Community reimposed its 16-percent duty on imports of live cattle and calves and the 20-percent duty on fresh, chilled, and frozen beef. Fifty percent levies were also put into effect.

The EC reinstated full duties because the Community's cattle prices during the previous week had been less than 103 percent of the EC orientation price of 86.20 units of account

per 100 kilograms. The previous condition, established by the EC Council July 19, 1973, had been that duties for cattle and beef and the applicable levies could be fully suspended only if EC cattle market prices exceeded the orientation price by 3 percent. Cattle prices in the Community have tended to fall in recent weeks. This may be partly because of buyer resistance and certainly because of the main grazing season's close.

Japan Opens Market to Danish Pork Products

Denmark expects to expand substantially its share of the growing Japanese pork market, which has been opened to all Danish pork products. Until recently Danish exports to Japan consisted of smoked or canned products because imports of fresh or frozen pork were prohibited. On August 25, 1973, Japan declared Denmark to be free of foot-and-mouth disease and opened its market.

Denmark's long-term prospects for fresh and frozen pork sales to Japan are viewed as excellent, although in the short run Danish export expansion will be limited by currently reduced pork outturn and by commitments to its traditional market, the United Kingdom.

Denmark may also continue as a major supplier of Japan's live hog imports. Since January 1, 1973, when Denmark released its Landrace hogs for export, Japan has purchased 337 head of total exports of 350.

Argentina's Cattle Slaughter And Output Down in Mid-1973

Argentina's cattle slaughter during the first half of 1973 totaled 4.8 million head, 4 percent less than the 5 million slaughtered during the same period last year. Carcass weights increased slightly to 480 pounds, but beef output dropped 3 percent to slightly more than a million pounds during the January-June period.

Beef exports during the first half of 1973 dropped to 317,000 metric tons (carcass-weight equivalent), compared with 332,000 tons shipped in the same period in 1972. In the last month of the period, beef exports dropped to 40,000 tons, 15 percent lower than the previous month, and the lowest level this year.

The f.o.b. value of beef exports during the period reached nearly \$350 million, up 32 percent from the first half of last year, reflecting higher world prices.

Domestic consumption, based on carcass-weight equivalent, fell off from 748,000 tons in the first half of 1972 to 720,000 tons in the comparable period in 1973.

Italians Interested in U.S. Rabbits

Italian rabbit breeders and traders have expressed interest in U.S. rabbits.

Italy usually imports rabbit breeding stock from France, England, and Belgium; however, some breeders have stated they prefer U.S. rabbits.

Italian breeders are gradually replacing traditional local breeds with foreign specialized breeds, especially White New Zealand, California, and Red Burgundy.

Official Italian sources report that during 1970, Italy's per capita consumption of rabbit meat was 3.3 pounds. But it is believed that official statistics understate rural consumption, where rabbit meat is a traditional food. Unofficial figures for

1971 put consumption at 4.2 pounds.

During 1971 Italy produced 92,300 metric tons of rabbit meat and imported 7,200 tons of slaughtered rabbits compared with 194 metric tons imported in 1961. The total estimated cost of these 1971 imports was US\$3.8 million.

The number of rabbits bred in Italy during 1970 is estimated at 68,927,800 head, more than 6 million of which were produced in specialized and modern housing operations. Experts believe that in the next 5 years the rate of increase in rabbit numbers should be at 5-10 percent per year.

Statistics also reveal an increasing number of rabbits are used for experimental tests in pharmaceutical and biological laboratories. The pharmaceutical industry in the Milan area, for instance, absorbs about 12,000 rabbits per month. The most desired breeds for these tests are White New Zealand, California, and local brown breeds.

United Kingdom Lifts Ban on Horse Imports

The U.K. ban on imports of U.S. horses—imposed April 1, 1973, because of outbreaks of Venezuelan equine encephalomyelitis in this country—was lifted September 15. The British action is important to U.S. quarter-horse owners because U.S. race horses are usually quarantined in the United Kingdom prior to participation in Australian races.

TOBACCO

Japanese Growers Demand Higher Price for 1973 Tobacco Crop

Japan's Tobacco Production Council will reconsider the 1973 tobacco crop price schedule in answer to demands from growers who demonstrated in front of the Japanese Monopoly Corporation (JMC) headquarters in Tokyo, August 23. The price was originally set at 722 yen per kilogram (approximately 86 U.S. cents per pound), a 7.11-percent increase over the 1972 price, but the private growers demanded 804 yen (96 U.S. cents per pound), a 19.3-percent increase. They argued a 19-percent wage increase recently won by labor unions and the annual 15-plus-percent inflation rate necessitated the increase. Several Diet members representing major parties were at the rally and reportedly support grower demands.

If the price is revised it will be the first time in many years.

The 1973 crop, which has had excellent growing conditions and few insect problems, is forecast at over 188 million pounds, up 3.6 percent from the previous year's production of less than 182 million pounds.

SUGAR AND TROPICAL PRODUCTS

Soviet Union Sets New Sugarbeet Incentive

On August 9, a Soviet decree established new wage incentives, apparently to increase the volume of sugarbeets harvested during the most favorable time. State farm workers involved in harvesting sugarbeets are to receive wage premiums after 35 percent of the crop area has been harvested. However, the higher wages were to be paid only on areas harvested

on or after September 20 in the upper Volga and Altay Kray regions, and on or after September 25 in the remaining sugarbeet areas. Based on these guidelines, wages for tractor drivers increased 40 percent and for all other workers, 25 percent. The decree recommended that these wage provisions also be adopted by collective farms.

Trinidad's 1973 Sugar Output Down 19 Percent

Trinidad's sugar production in calendar 1973 has been estimated at 183,738 long tons, down 19.5 percent from the previous year. A high incidence of unauthorized cane fires and a prolonged drought were responsible for the drop in output.

If recent rainfall is adequate, industry sources foresee a calendar year 1974 production of 220,000 long tons.

DAIRY AND POULTRY

U.S. Cheese Imports Up, But Lower Than Quota

U.S. imports of cheese gained during the first 7 months of 1973, although less than permitted under President Nixon's April 25 authorization of a temporary 50-percent increase in cheese import quotas for the period ending July 31. The amount of the authorized increase was approximately 63.9 million pounds.

Preliminary data show actual imports were 45.8 million pounds, or 72 percent, of the amount authorized. Import performance varied according to end use of the cheese. Cheeses for processing, including the Cheddar and American-type quotas, were almost fully utilized. Allocations for table cheeses were about two-thirds filled. Quotas for processed cheeses were poorly utilized; only 26 percent of the Gruyere-process quota (processed Swiss cheese) and 33 percent of the processed Edam and Gouda quota were imported.

An important factor in the unexpectedly low overall performance was the devaluation of the U.S. dollar which increased the f.o.b. price of many cheeses in the three big "price-break" categories thereby automatically shifting them into nonquota status.

Final data are expected to raise the total by a few percentage points but should not alter the overall picture.

Canada Plans Subsidy To Roll Back Milk Prices

In an effort to roll back milk prices, the Canadian Government has announced a plan to pay a consumer subsidy of 5 Canadian cents a quart on fluid milk. The exact mechanics for paying the subsidy will be negotiated between the Federal and Provincial Governments, producer marketing agencies, and milk processors.

The subsidy will be paid directly to processors with the understanding that milk retail prices will be contained and rolled back. The amount of the rollback may vary from Province to Province and will depend on results of the intergovernmental negotiations. However, once fixed, the price must remain at that level for 12 months.

Applicable also to skim milk and to skim milk having 2 percent butterfat, the subsidy will not be paid for such products as flavored milk. A 20-cents-per-pound subsidy will

be paid on skim milk powder in consumer-sized packs.

The milk subsidy is expected to cost about Can\$108 million.

FATS, OILS, AND OILSEEDS

India's 1973 Peanut Meal Exports Surpass Government Ceiling

India's exports of peanut meal through the first 2 weeks of September were reported at 700,000 metric tons, 12 percent, or 76,800 tons, above the volume shipped during the same period of 1972. Earlier expectations had been for a 250,000-ton decline in export volume, reflecting the major shortfall of 650,000 tons (meal basis), or 36.5 percent, in the 1972 peanut harvest.

The Indian Government had placed a ceiling of 600,000 tons on 1973 peanut meal exports, while exporters wanted an additional 150,000 to 200,000 tons beyond the official limit. Exports were 855,000 tons in calendar 1972.

India's 1973 Peanut Crop Estimated at 5.5 Million Tons

Latest forecasts by trade sources in India place the 1973-74 Indian peanut crop at least at 5.5 million metric tons (unshelled basis). If realized, a crop of this magnitude would be 40 percent, or 1.6 million tons, above the drought-reduced outturn of 1972-73, officially estimated at 3.9 million tons. However, unofficial reports have indicated acreage sown to peanuts in 1973-74 to be down 7 percent from the 1972-73 area and down 13 percent from that of 1971-72.

India's peanut output averaged 5.2 million during 1966-70, reaching an alltime high of 6.2 million tons in 1971-72.

GENERAL

Mexico Gets \$14-Million IADB Loan

A \$14-million loan to Mexico by the Inter-American Development Bank (IADB) is expected to help increase cotton, alfalfa, and wheat production in the Juárez Valley Irrigation District, reduce unemployment, and substantially increase worker income in the area. It will also help to boost Mexico's net exports of cotton, wheat, and other agricultural products and thus benefit Mexico's balance of payments, according to IADB.

With a total cost of about \$30 million, the development project will raise the District's annual water supply from 199 million cubic meters to 355 million and boost the net arable land area from approximately 42,000 acres to 60,500.

Other Foreign Agriculture Publications

- Record Exports Through June for Soybeans; Soybean Meal and Cottonseed Oil Exports Increase but Soybean Oil Exports Decline (FFO-14-73)
- U.S. Trade in Livestock, Meat, and Meat Products in July (FLM-18-73)

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FOREIGN AGRICULTURE

NEW ZEALAND'S POULTRY INDUSTRY EXPANDS

Continued from page 7

younger birds, others grow them to heavy weights and sell them on contract to poultry processors. Turkey breeders have been importing their day-old poult and grandparent stock from Australia.

Most turkey production is located inland in the Canterbury Plains of South Island. The area's soil tends be light, and land is less expensive. The live-weight price for turkeys is about 43 cents per pound. Retail price for an average 10-12 pound turkey is about \$1.07 to \$1.13 cents per pound.

Because of relatively small domestic industry imports of turkey, specialty products are especially attractive. The Ministry of Agriculture and Fisheries recently gave animal health approval for imports of U.S. cooked turkey products. Uncooked poultry meat imports from the United States are still prohibited because of Newcastle disease restrictions.

Five long tons of cooked U.S. turkey

products arrived in Auckland in mid-June, 1973. Importers have been encouraged by initial response to these specialty products, particularly in hotels, restaurants, and institutional trade. Further sales in 1973-74 could total as much as \$265,000, subject to New Zealand Government approval of import licenses. Import permits were recently issued to three different importers and a fourth is now applying for a license.

The future of U.S. specialty turkey items such as cooked rolls, roasts, hickory smoked and catering breasts, turkey salami, pastrami, and bologna looks very good. If access to the market can be improved by obtaining a tariff reduction to the British preferential rate of 20 percent, and if the Government continues to liberalize import licenses, U.S. exporters can expect substantial sales over the next few years for their specialty turkey items.

NEW ZEALAND: POULTRY MEAT PRODUCTION

Item	1971	1972 ¹	1971	1972 ¹
Broilers	1,000 head	1,000 head	1,000 pounds	1,000 pounds
Fowl	11,000	12,500	28,500	31,250
Turkeys	3,400	3,500	11,220	11,550
Ducks	250	260	3,125	3,250
Geese	150	155	570	590
Total	15	15	126	140
	14,815	16,431	42,541	46,780

¹ Estimated. Source: Ministry of Agriculture and Fisheries.

Nigeria's Peanut Crop

Continued from page 5

and meal were 39,000 tons (\$16.6 million) and 97,700 tons (\$8.9 million), respectively.

Comparative export figures for 1971 were peanuts, 134,400 tons (\$37.3 million); peanut oil, 42,300 tons (\$19.6 million), and peanut cake and meal, 97,700 tons (\$10.4 million).

Nigeria's major customers for peanuts in 1972 were France, taking 31,800 tons; Venezuela, 17,000; Italy, 14,300; and the United Kingdom, 12,500 tons. The U.K. market is virtually the sole export outlet for Nigerian peanut oil and peanut cake and meal, taking 36,300 tons of Nigeria's peanut oil out of total exports of 39,000 tons and 85,600 tons of peanut cake and meal.

During the first quarter of 1973, total peanut exports were 18,900 tons valued at \$6 million. Major customers in order of importance were Italy, Switzerland, and the United Kingdom. Peanut oil exports during the same period amounted to 46,400 tons worth \$6.4 million. The United Kingdom was the leading market for this commodity and for peanut cake and meal. It took 44,400 tons of total peanut oil exports of 46,400 tons, and 31,600 tons of peanut cake and meal.

Imports of peanuts and peanut products were negligible.

—Based on dispatch from

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